

ABSTRACT OF THE DISCLOSURE

An ESD protection circuit with high substrate-triggering efficiency. The circuit comprises a multi-finger-type device having a plurality of finger gates below
5 which a parasitic BJT is formed, a plurality of finger sources, each of which is an emitter of one parasitic BJT, and at least one finger drain coupled to a pad, a plurality of voltage drop elements, each of which is coupled between
10 one of the finger sources and a power line to detect a transient current flowing through one of the finger gates, and a plurality of feedback circuits, each of which is coupled between a base and an emitter respectively of a first and second parasitic BJT, and activates the first BJT to bypass ESD current during an ESD event.